

IN THE CLAIMS

This listing of claims replaces all prior versions:

1. **(Currently Amended)** An actuator having a recessed, movable electrode, the actuator comprising:

(a) a substrate including a stationary electrode attached thereto;

(b) a resilient structural layer including a first end fixed with respect to the substrate, a second end suspended over the substrate, and a surface ~~having a recess formed therein~~ between the first and second ends facing the substrate, the surface having a proximal portion and a recessed portion different from the proximal portion formed therein, the proximal portion being separated from the substrate by a distance less than the distance separating the recessed portion from the substrate; and

(c) a movable electrode having a first portion in ~~attached within the recess~~ recessed portion of the resilient structural layer surface and a second portion in the proximal portion, whereby the first and second portions of the movable electrode ~~is~~ are separated from the stationary electrode by ~~a gap~~ different gaps.

2. **(Canceled)**

3. **(Currently Amended)** A microscale, electrostatically actuated switch having a recessed, movable electrode, the switch comprising:

(a) a substrate including a stationary electrode and a stationary contact attached thereto;

(b) a resilient structural layer including a first end fixed with respect to the substrate, a second end suspended over the substrate, and a surface ~~having a recess formed therein~~ between the first and second ends facing the substrate, the surface having a proximal portion and a recessed portion different from the proximal portion formed therein, the proximal portion being separated from the substrate by a distance less than the distance separating the recessed portion from the substrate;

(c) a movable electrode having a first portion in attached within the recess recessed portion of the resilient structural layer surface and a second portion in the proximal portion, whereby the first and second portions of the movable electrode ~~is~~ are separated from the stationary electrode by ~~a first gap~~ first and second gaps, respectively; and

(d) a movable contact attached to the structural layer whereby the movable contact is separated from the stationary electrode by a distance corresponding to the second gap.

4. (Canceled)

5. (Currently Amended) A method of implementing an actuation function in an actuator having a recessed, movable electrode, comprising the steps of:

(a) providing an actuator having a recessed, movable electrode, the actuator comprising:

(i) a substrate including a stationary electrode attached thereto;

(ii) a resilient structural layer including a first end fixed with respect to the substrate, a second end suspended over the substrate, and a surface ~~having a recess formed therein~~ between the first and second ends facing the substrate, the surface having a proximal portion and a recessed portion different from the proximal portion formed therein, the proximal portion being separated from the substrate by a distance less than the distance separating the recessed portion from the substrate; and

(iii) a movable electrode ~~attached at the underside of the recess~~ having a first portion in the recessed portion of the resilient structural layer surface and a second portion in the proximal portion, whereby the first and second portions of the movable electrode ~~is~~ are separated from the stationary electrode by ~~a gap~~ different gaps;

(b) applying a voltage between the stationary electrode and the movable electrode to electrostatically couple the movable electrode with the stationary electrode across the gap, whereby the resilient structural layer is deflected towards the substrate.

6-7. (Canceled)

8. (New) An actuator according to claim 1, wherein the recessed portion is closer to the second end than the proximal portion and the proximal portion is closer to the first end than the recessed portion.

9. (New) An actuator according to claim 1, wherein during actuation from a rest state, the resilient structural layer is deflected toward the substrate, the proximal portion being separated from the substrate by a first smaller distance than the recessed portion in the rest state, and being separated from the substrate by a second smaller distance than the recessed portion during actuation.

10. (New) An actuator according to claim 8, wherein during actuation from a rest state, the resilient structural layer is deflected toward the substrate, the proximal portion being separated from the substrate by a first smaller distance than the recessed portion in the rest state, and being separated from the substrate by a second smaller distance than the recessed portion during actuation.

11. (New) A switch according to claim 3, wherein the recessed portion is closer to the second end than the proximal portion and the proximal portion is closer to the first end than the recessed portion.

12. (New) A switch according to claim 3, wherein during actuation from a rest state, the resilient structural layer is deflected toward the substrate, the proximal portion being separated from the substrate by a first smaller distance than the recessed portion in the rest state, and being separated from the substrate by a second smaller distance than the recessed portion during actuation.

13. (New) A switch according to claim 11, wherein during actuation from a rest state, the resilient structural layer is deflected toward the substrate, the proximal portion being separated from the substrate by a first smaller distance than the recessed portion in the rest state, and being

separated from the substrate by a second smaller distance than the recessed portion during actuation.

14. (New) A method according to claim 5, wherein the recessed portion is closer to the second end than the proximal portion and the proximal portion is closer to the first end than the recessed portion.

15. (New) A method according to claim 5, wherein during actuation from a rest state, the resilient structural layer is deflected toward the substrate, the proximal portion being separated from the substrate by a first smaller distance than the recessed portion in the rest state, and being separated from the substrate by a second smaller distance than the recessed portion during actuation.

16. (New) A method according to claim 14, wherein during actuation from a rest state, the resilient structural layer is deflected toward the substrate, the proximal portion being separated from the substrate by a first smaller distance than the recessed portion in the rest state, and being separated from the substrate by a second smaller distance than the recessed portion during actuation.